

# City of Alexandria, Virginia

## MEMORANDUM

DATE: AUGUST 15, 2014

TO: MEMBERS OF THE EISENHOWER WEST STEERING COMMITTEE

FROM: STEVE SINDIONG, PRINCIPAL PLANNER, T&ES

SUBJECT: RESPONSE TO QUESTIONS FROM THE STEERING COMMITTEE (JUNE 30, 2014 MEETING)

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**ISSUE:** Response to questions at the June 30, 2014 Eisenhower West Steering Committee meeting.

**RECOMMENDATION:** That the Committee receive the report.

**DISCUSSION:** At the June 30, 2014 Eisenhower West Steering Committee meeting, staff from Transportation & Environmental Services, and the transportation study consultant (RK&K) provided an overview on the existing transportation conditions within the Eisenhower West Small Area Plan. In addition, there was a discussion on the proposed multimodal bridge, originally recommended in the Landmark / Van Dorn Corridor Plan (2009). The following questions were raised by the Committee, and staff has prepared a response to each question, as shown below.

**Please make available the DASH Comprehensive Operations Analysis (COA) telephone survey results.**

The DASH COA telephone survey was conducted in May 2013 to gather input to be able to assess how public transit should be designed to best serve the needs of residents. The random survey was administered by phone to residents of the City of Alexandria. A total of 707 surveys were completed. The Survey Report includes all of the questions and responses, and is available on the project webpage [www.alexandriava.gov/eisenhowerwest](http://www.alexandriava.gov/eisenhowerwest)

### What is the percentage of persons that live adjacent to a Metrorail station that use transit as their primary commute method?

In 2006, WMATA completed the 2005 Development Related Ridership Survey report, which is available on the project webpage [www.alexandriava.gov/eisenhowerwest](http://www.alexandriava.gov/eisenhowerwest). The purpose of the 2005 Development Related Ridership Survey was to update a 16-year old study conducted by the Washington Metropolitan Area Transit Authority (WMATA) that surveyed the travel behavior of persons traveling to and from office, residential, hotel and retail sites near Metrorail stations. The 2005 effort sought to determine if modal splits for these land uses have changed over time and whether certain physical site characteristics still impact transit ridership. For the 2005 study, there were 49 office and residential sites near 13 different Metrorail stations that were analyzed as part of the survey. The survey results confirmed previous findings that there is a correlation between walking distance of a site to a Metrorail station and transit ridership. In general, the closer a site is to the station, the greater likelihood those traveling to/from or within a site choose Metrorail as their travel mode. Based on the survey results, this relationship was stronger for residential sites than for office sites.

#### Regression Equation Summary for Office Commute and Residential Trips by Distance from Station

Distance (Mile)	Metrorail Mode share		All Transit <sup>1</sup> Mode Share		Auto Mode Share	
	Office Commute	Residential	Office Commute	Residential	Office Commute	Residential
0	35%	54%	46%	55%	48%	29%
1/4	23%	43%	30%	45%	66%	41%
1/2	10%	31%	13%	36%	83%	54%

Notes: <sup>1</sup> Includes Metrorail, Metrobus, commuter rail and other transit options.

The study found that in outlying locations, residential uses may be more reliable in increasing Metrorail ridership than office uses. Outlying office sites tended to produce trips connected with areas outside the core, which generally aren't as well served by transit. In addition, survey results showed that high-density, mixed-use environments with good transit access generated higher shares of transit and walk trips—especially midday trips from and visitor trips to office sites, than those areas dominated by a single use.

#### Office Commute and Residential Mode Share by Concentric Location Typology

Mode Share	CBD	Inside the Beltway	Outside the Beltway
<b>Office Site Commute</b>			
Metrorail	63%	21%	8%
Metrobus & Other Transit	12%	9%	3%
Auto	21%	66%	89%
Walk & Other	5%	6%	0%
<b>Residential Sites</b>			
Metrorail	50%	43%	31%
Metrobus & Other Transit	6%	6%	1%
Auto	18%	39%	62%
Walk & Other	26%	14%	6%

**What is the current utilization of the Van Dorn Metrorail Station, and how do you define an “Underutilized” Metrorail station?**

Based on May 2014 counts, the Van Dorn Metrorail station typically has approximately 3,400 riders (6,800 trips including entries and exits) per weekday. In comparison, the Braddock Metrorail station has approximately 4,700 daily riders, King Street Metrorail station has approximately 9,300 daily riders, and Eisenhower Avenue Metrorail station has approximately 1,900 daily riders. The table below shows the mode of access for each of the stations, based on a 2012 Metrorail survey. As seen, the Van Dorn Metrorail station has a significantly higher number of users that access the station by shuttle or by driving and parking at the station, as compared to the other stations. The number of riders that walked to the Van Dorn Metrorail station is significantly lower than the other three stations.

According to WMATA, the station itself has enough capacity within its existing infrastructure to accommodate more riders through the existing escalators, elevator, fare gates and platform length. Future density in land use surrounding the station would likely be able to be accommodated within the station. However, today, approximately 70% of daily riders arrive by car (personal, or dropped off), or shuttle. There is little additional room to accommodate more of these types of riders. The existing parking lot is at capacity. The parking utilization at the station is at 121% (based on counts in April and May, 2014), implying that there is some turnover during the day as drivers leave a full lot and others fill their spots. There is also limited capacity for additional shuttles. Therefore, the best way to accommodate additional riders to the station would be through conversion of existing vehicular trips to walking, biking and bus. Improving pedestrian and bicycle connectivity from surrounding areas to the station would help to encourage access to the station for these modes.

<b>Ridership and Mode of Access to Metrorail Stations</b>										
<b>Station</b>	<b>Daily Riders*</b>	<b>VRE / Amtrak</b>	<b>Bus</b>	<b>Walk</b>	<b>Bicycle</b>	<b>Drove / Parked</b>	<b>Dropped Off</b>	<b>Shuttle</b>	<b>Taxi</b>	<b>TOTAL</b>
Van Dorn	3,400	0.0%	21.1%	9.4%	0.4%	19.2%	16.0%	33.2%	0.8%	100%
King Street	9,300	2.5%	18.3%	53.8%	1.0%	3.9%	11.9%	8.7%	0.0%	100%
Eisenhower	1,900	0.0%	5.0%	61.0%	1.3%	12.6%	14.5%	5.7%	0.0%	100%
Braddock	4,700	0.0%	21.3%	62.4%	4.7%	2.9%	8.7%	0.0%	0.0%	100%
<i>Source: Mode is based on 2012 WMATA Metrorail Survey</i>										
<i>* Daily riders are based on 2014 counts, and are approximate based on total number of entries/exits</i>										

**Please clarify the funding requirements of the Clermont Avenue Connector**

In January 2011, the City met with the Virginia Department of Transportation (VDOT) and Federal Highway Administration (FHWA) to discuss the issue. The FHWA determined that the City would need to conduct an assessment as to whether existing and planned projects would meet the purpose and need of the Eisenhower Avenue Connector project. If the City decides to pursue the “No-Build” alternative for the connector road, the process to arrive at that conclusion would be a deciding factor in whether federal funds that have been used toward other projects, or still unspent would need to be paid back. The process would need to review the purpose and need of the project, review changes that have occurred in the project area, and update the traffic to determine if the connector road is still needed based on existing and planned improvements, such

as the City's transitways. In January 2014, the City met again with VDOT, and VDOT stated that the City would need to conduct an update to the Environmental Assessment (EA) that was completed in 1993. The EA Update would assume a 2040 Baseline alternative that includes planned land uses and transportation investments, and is required to include public input. The update to the EA is anticipated to be completed in late 2014. A decision by VDOT and FHWA is anticipated in early 2015.

**Why are we studying the need for a Clermont connector, when the federal land grant (associated with Cameron Station) won't allow for a bridge anyway?**

The Clermont Avenue Interchange with I-95 Environmental Assessment Update, being conducted as part of the Eisenhower West Transportation Study, is not analyzing a new Clermont Avenue connector. The EA Update is re-examining a "No Build" alternative, that assumes planned land uses and transportation infrastructure, including the multimodal bridge (recommended in the Van Dorn Corridor Plan and in the City's Capital Improvement Program), assumed in the year 2040. If the EA Update determines that a "No Build" alternative is feasible, the remaining funds the City received for the Clermont Avenue connector project may be used toward other projects.

The federal land grant approved in 1996 does not prohibit a connector through Ben Brenman Park. The Coordinated Development District (CDD#9) concept plan for Cameron Station, approved in 1996, specified that if a connection between Eisenhower Avenue and Duke Street is built, the preferred alignment for the connection is at the western edge of Cameron Station (Armistead Boothe Park). As part of the federal land grant, the City was granted a certain amount of Park Land and a certain amount of right-of-way (3.2 acres) in the transaction. In the City's discussions with the Interior Department, it was determined that the right-of-way could be moveable and even transferred between the east (Ben Brenman) and west (Armistead Boothe Park) parks as long as there was no net loss of parkland. Due to public opposition of a connector through the east park at the time, all the right-of-way needed for the connection was placed within the west park (along the western and northern edges), with the understanding that it could still be moved to the east park if needed in the future. The right-of-way within Armistead Boothe Park is being considered as an option for the proposed multimodal bridge.

**How much funding is in the current Capital Improvement Program for the Multimodal Bridge?**

The FY 2015-2024 Capital Improvement Program (CIP) includes \$500,000 for design in FY 2023.

**What is the frequency of trains that use the Norfolk Southern tracks?**

The rail line between Virginia Paving and Eisenhower Avenue is used for Norfolk Southern freight trains, as well as passenger service including Virginia Railway Express (VRE), and Amtrak. The total number of trains of all the lines on a daily basis is shown below. The rail line and spur is also used by Norfolk Southern to make up and break down trains. Inserting an at

grade road would negatively impact operations, since a train could not be parked across the road. The Federal Railroad Administration (FRA) rules require that every train sound its horn for 15 to 20 seconds at 96 to 110 decibels. Given the proximity of housing, this could be perceived as a negative impact. A quiet zone is possible, but it is generally the railroad's policy that a Quiet Zone is the sole expense of the sponsor agency, not the railroad. Finally, in the past, Norfolk Southern has expressed that whenever a new grade crossing is proposed, an existing crossing be closed. The nearest at-grade crossing on this line is in Clifton, in Fairfax County.

<b>Number of Trains using Alexandria's Norfolk Southern Line</b>							
<b>LINE</b>	<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>AMTRAK</b>							
Cardinal	2			2		2	
Northeast Regional	2	2	2	2	2	2	2
Crescent	2	2	2	2	2	2	2
<b>Amtrak Total</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>4</b>
<b>VRE</b>		16	16	16	16	16	
<b>NORFOLK SOUTHERN</b> <i>(Maximum no. of trains)</i>	3	5	5	5	5	5	3
<b>Total All Lines</b>	<b>9</b>	<b>25</b>	<b>25</b>	<b>27</b>	<b>25</b>	<b>27</b>	<b>7</b>
Note: The passenger train totals include both northbound and southbound trains (half are northbound and half are southbound). Norfolk Southern trains are not necessarily bi directional each day.							